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09/740,487	12/19/2000	Michelle Q. Wang Baldonado	D/99342	3504

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EXAMINER	
NGUYEN, ANH T	
ART UNIT	**PAPER NUMBER**
2127	6

DATE MAILED: 12/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	09/740,487	WANG BALDONADO ET AL.	
	Examin r	Art Unit	
	Anh T Nguyen	2127	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 December 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2*.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. This office action is responsive to application 09/740,487, filed 12/19/2000.
2. The title of the invention is "System for Creating Efficient Multi-Step Document Conversion Services", as originally filed.
3. Claims 1-33 are presented for examination.

Specification

4. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is required for correcting any errors of which applicant may become aware in the specification. Appropriate correction is required.

Claim Objections

5. Claim 17 is objected to because of the following informalities:

   Page 63, line 19, "electing" should recite --selecting--.

   Page 63, line 21, "reparing" should recite --preparing--.

   Page 64, line 1, "ransmitting" should recite --transmitting--.

   Appropriate correction is required.-

6. Claims 32 and 33 are objected to as being improper dependent claims because they depend on a claim that does not exist. Applicant is referring to "the article of manufacture of **claim 40"**, which does not exist. For purposes of applying prior art, examiner interprets that applicant meant to refer to the article of manufacture of **claim 30** and will treat claims 32 and 33 as such.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 17-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As written, the invention does not need to be practiced in the useful or technological arts and therefore are not limited to practical applications in the technological arts. Examiner finds both "a client" and " a service provider" are not tangibly embodied and merely represent an abstract idea, thus making the claims directed to nonfunctional descriptive material.

8. Claims 30-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As claimed, "information storage medium" is such a broad recitation that the software described is not necessarily computer readable and executable. Therefore, the claims are directed to nonfunctional descriptive material.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

9. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-33 rejected under 35 U.S.C. 102(e) as being anticipated by Hirabayashi, (USPN 6,549,936).

Regarding Claim 1:

Hirabayashi discloses,

receiving a job from an external source, wherein the job includes at least one task(Hirabayashi, col.2, lines 35-37, "At this point in time, it becomes possible to receive transfer of the next job");

selecting a program, subsequent to receiving the job, which includes a first part and a second part, which may be used in executing the job(Hirabayashi, col.3, lines 15-18, "It is preferable that the above-described request data stream should be a text data-formatted stream and, utilizing predetermined tags, describe various types of parameter information");

preparing a batch job by associating the selected program with the job(Hirabayashi, col.3, lines 13-14, "the executing instruction being included in the request data stream"); and,

transmitting the batch job toward the batch job execution system(Hirabayashi, col.1, lines 14-16, "One computer transfers a batch job to another computer, and another computer executes the batch job").

Regarding Claim 2:

Hirabayashi discloses wherein the step identifies a service which is offered by the batch job execution system which can be used in executing at least a portion of one of the tasks of the batch job (Hirabayashi, col.5, lines 60-62, "Registering a job into the respective servers 101-103, and causing the respective servers to execute the job in a batch-processing manner"); and,

scheduling information, which organizes the order in which the steps may be performed by the batch job execution system and whether the steps may be performed independent of one another or in parallel with one another(Hirabayashi, col.5, lines 67, col.6, lines 1-6, "At the time of this job transfer, a plurality of scripts to be executed on the server can be included into the transfer data. This condition makes it possible to simultaneously instruct transfer of the plurality of scripts and the execution thereof through the job registration at a one-time, thereby being capable of causing the server to perform complicated processings").

Regarding Claim 3:

Hirabayashi discloses wherein the second part of the program is for executing at least a portion of one of the tasks of the batch job; and, is further capable of generating additional steps to be executed by the batch job execution system in order to complete the task being executed

(Hirabayashi, col.6, lines 8-10, "It is also possible to execute the job by creating or modifying the scripts immediately before the execution").

Regarding Claim 4:

Hirabayashi discloses wherein the program is selected from a plurality of programs stored in a library, wherein the programs are capable of being executed by the batch job execution system (Hirabayashi, see FIG.9, element 926, "a script file storing unit 926").

Regarding Claim 5:

Hirabayashi discloses receiving a signal from the external source designating the program to be selected (Hirabayashi, col.2, lines 43-51, "A job transferring method of sending a request from a first computer to a second computer so as to cause a job to be registered and executed, including a step of receiving, a request data stream, the request data stream including content of a plurality of scripts, the content of the plurality of scripts in the received request data stream and storing the content of the plurality of scripts as a script file for each script").

Regarding Claim 6:

Hirabayashi discloses,

receiving a first signal from the external source, which identifies the input type of information included in the job (Hirabayashi, col.2, lines 43-51, "A job transferring method of sending a request from a first computer to a second computer so as to cause a job to be registered

and executed, including a step of receiving, a request data stream, the request data stream including content of a plurality of scripts");

receiving a second signal from the external source, which identifies the desired output type of information to be obtained when the job has been executed; and, wherein the step of selecting a program is in response to receiving the first and second signal (Hirabayashi, col.3, lines 22-27, "including a step of sending, by the second computer, a plurality of result files from the second computer to the first computer, the plurality of result files being created as a result of the second computer's executing the job, and a step of receiving, by the first computer, the plurality of result files").

Regarding Claim 7:

Hirabayashi discloses,

determining the input type information included in the received job(Hirabayashi, col.2, lines 43-51, "including a step of receiving, a request data stream, the request data stream including content of a plurality of scripts");

receiving a signal from the external source , which identifies the desired output to be obtained when the job has been executed; and, wherein the step of selecting a program is in response to the steps of determining and receiving (Hirabayashi, col.3, lines 22-27, "including a step of sending, by the second computer, a plurality of result files from the second computer to the first computer, the plurality of result files being created as a result of the second computer's executing the job, and a step of receiving, by the first computer, the plurality of result files").

Regarding Claim 8:

Hirabayashi discloses,

receiving a batch job comprising at least one task (Hirabayashi, col.1, lines 23-24, "At this point in time, it becomes possible to receive transfer of the next job"), by a first part of the batch job execution system, wherein the batch job may be executed using a plurality of service providers(Hirabayashi, col.6, lines 10-14, "Platforms (for example, UNIX, a mainframe, or Windows NT (i.e., brand name of Microsoft Corporation)) that are independent of each other can be used as the respective servers and the respective clients");

determining for the tasks of the batch job a service type, offered by a service provider of the batch job execution system, which may be used for performing the task (Hirabayashi, col.6, lines 28-32, "The server gateway carries out the following processing: Receiving a variety types of requests (demands) from the respective clients");

creating a step for each task, wherein the steps comprise a first reference to the determined service type needed to perform the task (Hirabayashi, col.6, lines 29-30, "judging to which server the respective requests should be transferred"), and a second reference to the task (Hirabayashi, col.5, lines 1-4,"the plurality of result files being created as a result of executing the job, and means for sending the created response data stream from the second computer to the first computer";

determining an efficient way to organize the created steps for execution by the batch job execution system (Hirabayashi, col.5, lines 6-7,"storing the content of the plurality of result");

preparing a program which comprises the created steps, and the organization of steps for execution by the batch job execution system; and, transmitting the batch job and the prepared

program toward a second part of the batch job execution system(Hirabayashi, col.5, lines 64-67, "Concretely speaking, registering the job means that a program-executing instruction written in a predetermined job control language is transferred to a server").

Regarding Claim 9:

Hirabayashi discloses wherein the step of determining a service type further comprises the step of, referencing a provider matrix, wherein the provider matrix comprises: a list of services which are capable of being performed by the batch job execution system; and, a list of service providers which are capable of performing the services.

It is inherent that in order to determine a service type, the step of referencing a provider matrix (i.e. a list of services and a corresponding list of service providers capable of performing the services) is necessary, essential and therefore intrinsic in the step of "judging to which server the respective requests should be transferred" (Hirabayashi, col.6, lines 29-30).

Regarding Claim 10:

Hirabayashi discloses wherein the program is for, executing at least a portion of one of the tasks of the batch job; and, is further capable of generating additional steps to be executed by the batch job execution system in order to complete the task being executed (Hirabayashi, col.6, lines 8-10, "It is also possible to execute the job by creating or modifying the scripts immediately before the execution").

Regarding Claim 11:

Hirabayashi discloses,

receiving the task of the batch job which is to be executed by a service provider(Hirabayashi, col.6, lines 53-55," The server gateway 203 receives the request block 202 transferred from the respective clients and analyzes the request");

making a call to start a session with a remote platform, in response to receiving the task(Hirabayashi, see FIG.3, col.7, lines 19-23, "a server 301 waits for a connect request from the client 302. A client 302 issues a connect instruction, i.e., a connect () 321, thereby establishing the connection with the server 301");

making a call to put, subsequent to making a call to start a session, which transfers at least a portion of the information in the task to be executed to the remote platform(Hirabayashi, see FIG.3, col.7, lines 24-26, "the client 302 sends a request for any one of the above-described job registration (SUBMIT)");

making a call to convert, subsequent to making a call to put, which instructs the remote platform to perform a function on the information transferred to the remote platform (Hirabayashi, see FIG.3, col.7, lines 28-30, "In accordance with a read instruction, i.e., a read( ) 312, the server 301 receives the request and performs the processing in response to the request");

making a call to get, subsequent to making a call to convert which retrieves the converted information from the remote platform(Hirabayashi, see FIG.3, col.7, lines 47-49, "in the job-information acquisition (GET), it is allowable to provide the server with a filer function based on acquisition conditions") ;

repeating each step of making a call to put, convert and get until the task is completed(Hirabayashi, see FIG.3, col.7, lines 33-34, "These reads and writes are repeated a plurality of times in correspondence with an amount of the data"); and,

making a call to end the session with the remote platform (Hirabayashi, see FIG.3, col.7, lines 34-37, "After these processings, the server 301 executes a close, i.e., a close( ) 314 and the client 302 executes a close, i.e., a close( ) 324, thus terminating the communication sequence") .

Regarding Claim 12:

Hirabayashi discloses wherein the step of making a call to start a session further comprises creating a unique address which identifies the session; and the step of making a call to end the session terminates the unique address (Hirabayashi, see FIG.3, col.7, lines 44-46, "the employment of a series tag controls continuation of the data and termination of the transmission/reception thereof").

Regarding Claim 13:

Hirabayashi discloses wherein the remote platform is operating on a Windows based machine; and the service provider is operating on a UNIX based machine (Hirabayashi, col.6, lines 11-14, "Platforms (for example, UNIX, a mainframe, or Windows NT (i.e., brand name of Microsoft Corporation)) that are independent of each other can be used as the respective servers and the respective clients").

Regarding Claim 14:

Hirabayashi discloses,

receiving the task to be executed from a first portion of the batch job execution system by a second portion of the batch job execution system(Hirabayashi, col.6, lines 53-55, "The server gateway 203 receives the request block 202 transferred from the respective clients and analyzes the request");

creating a plurality of steps, in response to receiving the task, which must be executed by a plurality of other service providers in order to complete the task(Hirabayashi, col.6, lines 58-60, "creates the response data, and then creates a text-based response data stream 205 referred to as a response block 205");

transmitting the plurality of steps to be completed toward the first portion of the batch job execution system for execution(Hirabayashi, col.6, lines 60-62, "thereby returning the response data back to the client 201 of the request issue source");

receiving a plurality of results from the first portion of the batch job execution system once the plurality of steps have been executed(Hirabayashi, col.6, lines 57-58, "receiving the execution result transferred from the server 204"); and,

preparing an output comprising the plurality of results(Hirabayashi, col.5, lines 61-64, "and causing the respective servers to execute the job in a batch-processing manner, and then causing the respective servers to return the result back to the respective clients").

Regarding Claim 15:

Hirabayashi discloses wherein the first portion of the batch job execution system is a job management apparatus (Hirabayashi, see FIG.1, col.5, line 53-59, and "FIG. 1 illustrates an example of the entire configuration of a system to which the job transferring method relating to the present invention is applied. In FIG. 1, reference numerals 101-103 denote computers that become servers each. Reference numerals 111-114 denote computers that become clients each. The servers 101-103 and the clients 111-114, which are connected to a network 120, are capable of providing/receiving various kinds of information among the respective apparatuses").

Regarding Claim 16:

Hirabayashi discloses wherein the second portion of the batch job execution system is a service provider (Hirabayashi, see FIG.1, col.5, line 53-59, and "In FIG. 1, reference numerals 101-103 denote computers that become servers each. Reference numerals 111-114 denote computers that become clients each. The servers 101-103 and the clients 111-114, which are connected to a network 120, are capable of providing/receiving various kinds of information among the respective apparatuses").

Regarding Claim 17:

Hirabayashi discloses,

a client (Hirabayashi, see FIG.1, col.5, line 53-59, and "In FIG. 1, reference numerals 101-103 denote computers that become servers each. Reference numerals 111-114 denote computers that become clients each. The servers 101-103 and the clients 111-114, which are

connected to a network 120, are capable of providing/receiving various kinds of information among the respective apparatuses"), which is capable of receiving a job from an external source, wherein the job includes at least one task (Hirabayashi, col.4, line 30, "receiving the request sent from the first computer so as to register"), wherein the client is for: selecting a program which comprises a first part and a second part, wherein the program may be used in executing the job(Hirabayashi, col.4, lines 27-29, "including a first computer for sending a second computer a request for causing a job to be registered and executed"); preparing a batch job by associating the selected program with the job(Hirabayashi, col.3, lines 13-14, "the executing instruction being included in the request data stream"); and, transmitting the batch job toward the batch job execution system (Hirabayashi, col.1, lines 14-16, "One computer transfers a batch job to another computer, and another computer executes the batch job").

Regarding Claim 18:

Hirababyashi discloses wherein the first part of the program comprises: at least one step, wherein the steps identify a service which is offered by the batch job execution system which may be used in executing at least a portion of one of the tasks of the batch job (Hirabayashi, col.5, lines 60-62, "Registering a job into the respective servers 101-103, and causing the respective servers to execute the job in a batch-processing manner"); and, scheduling information, which organizes the order in which steps may be performed by the batch job execution system and whether the steps may be performed independent of one another or in parallel with one another (Hirabayashi, col.5, lines 67, col.6, lines 1-6, "At the time of this job transfer, a plurality of scripts to be executed on the server can be included into the transfer data. This condition makes it possible to

simultaneously instruct transfer of the plurality of scripts and the execution thereof through the job registration at a one-time, thereby being capable of causing the server to perform complicated processings").

Regarding Claim 19:

Hirabayashi discloses wherein the second part of the program is for: executing at least a portion of one of the tasks of the batch job; and, is further capable of generating additional steps to be executed by the batch job execution system in order to complete the task being executed (Hirabayashi, col.6, lines 8-10, "It is also possible to execute the job by creating or modifying the scripts immediately before the execution").

Regarding Claim 20:

Hirabayashi discloses wherein the program is selected from a plurality of programs stored in a library, which are capable of being executed by the batch job execution system (Hirabayashi, see FIG.9, element 926, "a script file storing unit 926").

Regarding Claim 21:

Hirabayashi discloses wherein the client is further for, receiving a signal from the external source designating the program to be selected (Hirabayashi, col.2, lines 43-51, "A job transferring method of sending a request from a first computer to a second computer so as to cause a job to be registered and executed, including a step of receiving, a request data stream, the request data stream including content of a plurality of scripts, the content of the plurality of scripts in the

received request data stream and storing the content of the plurality of scripts as a script file for each script") .

Regarding Claim 22:

Hirabayashi discloses wherein the client is further for: receiving a first signal from the external source which identifies the input type of information included in the job (Hirabayashi, col.2, lines 43-51, "A job transferring method of sending a request from a first computer to a second computer so as to cause a job to be registered and executed, including a step of receiving, a request data stream, the request data stream including content of a plurality of scripts"); receiving a second signal from the external source which identifies the desired output type of information to be obtained when the job has been executed; and, selecting a program based on the first and second signal, which includes information necessary for executing the job(Hirabayashi, col.3, lines 22-27, "including a step of sending, by the second computer, a plurality of result files from the second computer to the first computer, the plurality of result files being created as a result of the second computer's executing the job, and a step of receiving, by the first computer, the plurality of result files").

Regarding Claim 23:

Hirabayashi discloses wherein the client is further for: determining the input type information included in the received job (Hirabayashi, col.2, lines 43-51, "including a step of receiving, a request data stream, the request data stream including content of a plurality of scripts"); receiving a signal from the external source which identifies the desired output to be obtained

when the job has been executed; and, selecting a program based on input type and the desired output, which includes information necessary for executing the job (Hirabayashi, col.3, lines 22-27, "including a step of sending, by the second computer, a plurality of result files from the second computer to the first computer, the plurality of result files being created as a result of the second computer's executing the job, and a step of receiving, by the first computer, the plurality of result files").

Regarding Claim 24:

Hirabayashi discloses,

a service provider, for: receiving a batch job comprising at least one task (Hirabayashi, col.1, lines 23-24, "At this point in time, it becomes possible to receive transfer of the next job"), by a first part of the batch job execution system, wherein the batch job may be executed using a plurality of service providers (Hirabayashi, col.6, lines 10-14, "Platforms (for example, UNIX, a mainframe, or Windows NT (i.e., brand name of Microsoft Corporation)) that are independent of each other can be used as the respective servers and the respective clients"),

determining for the tasks of the batch job a service type, offered by a service provider of the batch job execution system, which may be used for performing the task(Hirabayashi, col.6, lines 28-32, "The server gateway carries out the following processing: Receiving a variety types of requests (demand) from the respective clients");

creating a step for the tasks, wherein the step comprises a references to the determined service type needed to perform the task, and a reference to the task(Hirabayashi, col.6, lines 29-30, "judging to which server the respective requests should be transferred");

determining an efficient way to organize the created steps for execution by the batch job execution system (Hirabayashi, col.5, lines 6-7,"storing the content of the plurality of result");

preparing a program which comprises the created steps; and the organization of the steps for execution by the batch job execution system; and, transmitting the batch job and the prepared program toward a job management apparatus (Hirabayashi, col.5, lines 64-67, "Concretely speaking, registering the job means that a program-executing instruction written in a predetermined job control language is transferred to a server").

Regarding Claim 25:

Hirabayashi discloses wherein the service provider references a matrix, wherein the matrix comprises: a list of services, which are capable of being performed by the batch job execution system; and, a list of service providers, which are capable of performing the services.
It is inherent that in order to determine a service type, the step of referencing a provider matrix (i.e. a list of services and a corresponding list of service providers capable of performing the services) is necessary, essential and therefore intrinsic in the step of "judging to which server the respective requests should be transferred" (Hirabayashi, col.6, lines 29-30)

Regarding Claim 26:

Hirabayashi discloses wherein the program is for executing at least a portion of one of the tasks of the batch job, and is further capable of generating additional steps to be executed by the batch job execution system in order to complete the task being executed (Hirabayashi, col.6, lines 8-10,

"It is also possible to execute the job by creating or modifying the scripts immediately before the execution").

Regarding Claim 27:

Hirabayashi discloses,

a service provider, which is capable of receiving the task of the batch job which is to be executed wherein the service provider is for (Hirabayashi, col.6, lines 53-55," The server gateway 203 receives the request block 202 transferred from the respective clients and analyzes the request"):

making a call to start a session with a remote platform, in response to receiving the task (Hirabayashi, see FIG.3, col.7, lines 19-23, "a server 301 waits for a connect request from the client 302. A client 302 issues a connect instruction, i.e., a connect () 321, thereby establishing the connection with the server 301");

making a call to put(Hirabayashi, see FIG.3, col.7, lines 24-26, "the client 302 sends a request for any one of the above-described job registration (SUBMIT)"), subsequent to making a call to start a session, which transfers at least a portion of the information in the task to be executed to the remote platform;

making a call to convert, subsequent to making a call to put, which instructs the remote platform to perform a function on the information transferred to the remote platform(Hirabayashi, see FIG.3, col.7, lines 28-30, "In accordance with a read instruction, i.e., a read( ) 312, the server 301 receives the request and performs the processing in response to the request");

making a call to get, subsequent to making a call to convert, which retrieves the converted information from the remote platform(Hirabayashi, see FIG.3, col.7, lines 47-49, "in the job-information acquisition (GET), it is allowable to provide the server with a filer function based on acquisition conditions");

repeating each step of making a call to put, convert and get until the task is completed(Hirabayashi, see FIG.3, col.7, lines 33-34, "These reads and writes are repeated a plurality of times in correspondence with an amount of the data"); and,

making a call to end the session with the remote platform (Hirabayashi, see FIG.3, col.7, lines 34-37, "After these processings, the server 301 executes a close, i.e., a close( ) 314 and the client 302 executes a close, i.e., a close( ) 324, thus terminating the communication sequence").

Regarding Claim 28:

Hirabayashi discloses wherein the remote platform is operating on a Windows based machine; and the service provider is operating on a UNIX based machine (Hirabayashi, col.6, lines 11-14, "Platforms (for example, UNIX, a mainframe, or Windows NT (i.e., brand name of Microsoft Corporation)) that are independent of each other can be used as the respective servers and the respective clients").

Regarding Claim 29:

Hirabayashi discloses an apparatus for preparing and executing a task of a batch job by a batch job execution system, comprising: a service provider, which is capable of receiving the task to be executed from a job management apparatus (Hirabayashi, col.6, lines 53-55, "The server

gateway 203 receives the request block 202 transferred from the respective clients and analyzes the request"), wherein the service provider is for:

creating a plurality of steps which may be executed by a plurality of other service providers in order to complete the task(Hirabayashi, col.6, lines 58-60, "creates the response data, and then creates a text-based response data stream 205 referred to as a response block 205");

transmitting the plurality of steps to be completed toward the job management apparatus for execution(Hirabayashi, col.6, lines 60-62, "thereby returning the response data back to the client 201 of the request issue source");

receiving a plurality of results from the job management apparatus once the plurality of steps have been executed(Hirabayashi, col.6, lines 57-58, "receiving the execution result transferred from the server 204"); and,

preparing an output comprising the plurality of results(Hirabayashi, col.5, lines 61-64, "and causing the respective servers to execute the job in a batch-processing manner, and then causing the respective servers to return the result back to the respective clients").

Regarding Claim 30:

Hirabayashi discloses a client software component for: receiving a job from an external source, wherein the job may be executed using a plurality of service provider software components (Hirabayashi, col.2, lines 35-37, "At this point in time, it becomes possible to receive transfer of the next job"); selecting a program software component which references at least one of the plurality of service provider software components (Hirabayashi, col.3, lines 15-18, "It is

preferable that the above-described request data stream should be a text data-formatted stream and, utilizing predetermined tags, describe various types of parameter information"); preparing a batch job software component by associating the selected program software component with the job(Hirabayashi, col.3, lines 13-14, "the executing instruction being included in the request data stream"); and, transmitting the batch job software component toward a job management apparatus software component(Hirabayashi, col.1, lines 14-16, "One computer transfers a batch job to another computer, and another computer executes the batch job").

Regarding Claim 31:

Hirabayashi discloses wherein the service provider software component is for:

receiving a batch job software component; separating the batch job software component into a plurality of tasks, wherein the tasks may be performed by a service provider software component of a batch job execution system(Hirabayashi, col.6, lines 10-14, "Platforms (for example, UNIX, a mainframe, or Windows NT (i.e., brand name of Microsoft Corporation)) that are independent of each other can be used as the respective servers and the respective clients"); determining for the tasks a service type, offered by one of the service provider software components, which may be used for performing the task(Hirabayashi, col.5, lines 6-7,"storing the content of the plurality of result");

creating a step for each task, wherein the steps comprise a references to the service type needed to perform the task and a reference to the task(Hirabayashi, col.6, lines 29-30, "judging to which server the respective requests should be transferred";

determining an efficient way to organize steps for execution by the batch job execution system(Hirabayashi, col.5, lines 6-7,"storing the content of the plurality of result");

preparing a program software component, which comprises the steps and information designating the organization of the steps for execution by the batch job execution system; and, transmitting the batch job software component and the program software component toward a job management apparatus(Hirabayashi, col.5, lines 64-67, "Concretely speaking, registering the job means that a program-executing instruction written in a predetermined job control language is transferred to a server").

Regarding Claim 32:

Hirabayashi discloses wherein the service provider software component, which offers the service of conversion planning, references a provider matrix software component which comprises: a list of services which are capable of being performed by the batch job execution system; and, a list of service provider software components which are capable of performing the services.
It is inherent that in order to determine a service type, the step of referencing a provider matrix (i.e. a list of services and a corresponding list of service providers capable of performing the services) is necessary, essential and therefore intrinsic in the step of "judging to which server the respective requests should be transferred" (Hirabayashi, col.6, lines 29-30).

Regarding Claim 33:

Hirabayashi discloses wherein the program software component is for, executing at least a portion of one of the tasks of the batch job software component; and, is further capable of

generating additional steps to be executed by the batch job execution system in order to complete the task being executed (Hirabayashi, col.6, lines 8-10, "It is also possible to execute the job by creating or modifying the scripts immediately before the execution").

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh T Nguyen whose telephone number is (703) 305-8649. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Grant, can be reached on (703) 308-1108. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-5484.

Anh T. Nguyen

Art Unit 2127

December 10, 2003

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